

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

April 23, 2007

In Reply Refer To: WTR-7

Clifford Meeks, General Manager A-H Plating 1837 North Victory Place Burbank, California 91504

Re: September 5, 2006 Clean Water Act Inspection

Dear Mr. Meeks:

Enclosed is the April 23, 2006 report for our September 5, 2006 inspection of A-H Plating in Burbank, California. Please submit a short response to the findings in Sections 2 through 4 of this report, to EPA, the City of Burbank, and the Regional Water Quality Control Board, by **June 30, 2007**.

The main findings are summarized below:

- 1 A-H Plating qualifies as "zero-discharging" existing source job-shop metal finisher since it generates Federally-regulated process-related wastewaters but does not discharge process-related wastewaters to the sewers.
- 2 The local Burbank permit appropriately requires periodic self-certification of no discharge since compliance with Federal standards and local limits is achieved by not discharging to the sewers. Waste manifests should accompany the self-certifications.
- 3 A drainage line for the delivery of spents should be installed from the chemical storage area into the shop at multiple locations in order to eliminate the need for long hoses, thereby physically minimizing the potential of an unauthorized discharge to the sewers.

I certainly appreciate the helpfulness of your staff extended to me during this inspection. I remain available to Burbank and to you to assist in any way. Please do not hesitate to call me at (415) 972-3504 or e-mail at arrhur.greg@epa.gov.

Sincerely,

Greg V. Arthur CWA Compliance Office

Enclosure

cc: Kristy Laird, Burbank



U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Industrial User: A-H Plating

1837 North Victory Place, Burbank, California 91504 Zero Discharging Existing Source Job-Shop Metal Finisher

(40 CFR 413)

Treatment Works: City of Burbank

Burbank Water Reclamation Plant (NPDES Permit CA0055531)

Dates of Inspection: September 5, 2006 and September 6, 2006 (for pictures only)

Inspection Participants:

US EPA: Greg V. Arthur, Region 9, CWA Compliance Office, (415) 972-3504

RWQCB-Los Angeles: None

City of Burbank: Kristy Laird, United Water, Industrial Source Insp, (818) 972-1115

A-H Plating: Ruel Grey, Chemist, (818) 845-1897

Report Prepared By: Greg V. Arthur, Environmental Engineer

April 23, 2007

1.0 Scope and Purpose

On September 5, 2006 EPA and the City of Burbank conducted a compliance evaluation inspection of A-H Plating in Burbank, California. The purpose was to ensure compliance with the Federal, State and local regulations covering the discharge of non-domestic wastewaters into the sewers under the Clean Water Act. In particular, it was to ensure:

- Classification in the proper Federal categories;
- Application of the correct Federal, State and local standards at correct sampling points;
- Consistent compliance with the standards; and
- Fulfillment of Federal self-monitoring requirements.

A-H Plating, located at 1837 North Victory Place, would qualify as a categorical industrial user under the Clean Water Act within the Burbank sewer service area if it discharged process-related wastewaters to the sewers. The compliance of A-H Plating was assessed through this inspection as part of an on-going EPA evaluation of industrial users in EPA Region by industry sector. The inspection participants are listed on the title page. Arthur conducted the inspection on September 5, 2006 and returned to take photos on September 6.

1.1 Process Description

A-H Plating is a metal finishing job-shop that provides chromium, cadmium, and nickel plating on steel and stainless steel parts. A-H Plating also does business as Sunvair Coating Technology at 2117 West Empire Avenue. The chromium plating line comprises alkaline cleaning, hydrofluoric-acid etching, hard chromium plating, and alkaline anode cleaning. The cadmium plating line comprises cyanide-cadmium plating, and chromium conversion coating. The electroless nickel plating line involves sulfamate nickel plating, acid etching, zincate coating, lead stripping, ammonium nitrate cadmium stripping, and nickel strike plating. A-H Plating does not own the parts it finishes. Operations began in 1978.

1.2 Facility SIC Code

A-H Plating is assigned the SIC code for plating, polishing, anodizing, and coloring (SIC 3471) and metals coating (SIC 3479).

1.3 Facility Wastewater Sources

There are no process-related wastewater discharges from A-H Plating to the Burbank sewers. There are a number of process-related wastewater spents, all delivered by pump and hose to totes for off-site hauling. The metal finishing lines generate spents, rinses, and residuals. For the purposes of this report, the tank designation numbers are those identified by A-H Plating during this inspection. For the sole purpose of this inspection, the line designations in this report are the following: Hard Chrome Plating Line "A"; Cadmium Plating Line "B"; and Electroless Nickel Plating Line "C".

<u>Spent Solutions</u> – The imparted contamination from the processing of parts and the progressive drop in solution strength results in the generation of spent solutions. According to A-H Plating, all spent solutions are delivered by pump and hose to totes for hauling off-site as hazardous. The list of spent solutions follows below.

Baths Generating Spents	Baths Not Generating Spents	
A1 - chromium plating A2 - chromium plating A3 - chromium plating A5A - alkaline anode clean A7A - alkaline cleaning A11 - acid etching B9 - cyanide-cad plate B29 - chrome conversion	C11 - e-less nickel plate C12 - e-less nickel plate C13 - e-less nickel plate C14 - acid etching C15 - acid etching C16 - nickel strike C32 - zincate coating C40 - nitrate cad strip C46 - acidic lead strip	None
Hauled Off-site as Hazardou	Regenerated by Adds Only	

<u>Rinses</u> – A-H Plating employs first- or second-stage static drag-out or overtank spray rinses. There are no overflow rinses. Spent static drag-out rinses are delivered by pump and hose to totes for off-site hauling. The list of rinses follows below.

Rinses Not Discharged	Rinses Discharged	
A1A - 1° drag-out for A1 A2A - 1° drag-out for A2 A3A - 1° drag-out for A3 A7A - 1° overtank spray C11 - 1° overtank spray C12 - 1° overtank spray C13 - 1° overtank spray	A8 - 1° spray for A11 A8A - 2° static for A1/2/3 B10 - 1° spray static for B9 B11 - 2° static for B9 C14A - 1°spry static for C14	None
Reclaimed as Make-up	Hauled Off-site as Haz	Discharged to the Sewers

Residuals – A-H Plating employs overtank spray and drag-out rinses, DI water as make-up, as well as one acid activation steps to neutralize the surface chemistry of the previous step, all in order to extend the useful life of the metal finishing solutions. According to the shop chemist, A-H Plating hauls off-site for disposal as hazardous all generated tank bottom sludges, floor grime and debris, and tape masking debris. DI columns are serviced off-site by the vendor. No other residuals are generated on-site because A-H Plating provides no chemical treatment or preconditioning of any spent solutions, spent static rinses, or overflow rinses.

1.4 Facility Process Wastewater Handling

A-H Plating is not configured to discharge process-related wastewaters to the sewers and as a result does not provide any wastewater treatment. Instead, A-H Plating asserts that all spent solutions, spent static rinses, and debris are hauled off-site for disposal as hazardous.

Composition - The process wastewaters listed in section 1.3 above would be expected to contain cadmium, copper, chromium, lead, nickel, zinc, and acidity, as well as oil & grease, salts, surfactants, and other pollutants in the surface grime cleaned off of parts.

<u>Delivery</u> - A-H Plating uses a portable pump and long hose to deliver spent solutions to totes for off-site disposal. The hose length is sufficiently long enough to reach any portion of the shop including areas with working connections to the sewers, such as bathrooms. No floor drains were found. See the photos below and section 3.2 of this report.



Photo: Portable pump and hosing Taken By: Greg V. Arthur

Date: 09/06/06



Photo: Plating tanks located near the bathroom

Taken By: Greg V. Arthur

Date: 09/06/06

1.5 **POTW Legal Authorities**

The City of Burbank – Burbank operates a wastewater treatment plant, which discharges to the Los Angeles River, and an approved pretreatment program, as required by the State of California in the Los Angeles RWQCB's Waste Discharge Requirements, No. R4-2006-0085, reissued to Burbank in 2006 and serving as NPDES Permit No. CA0055531. Burbank has established a sewer use ordinance that applies to all industrial users within its city limits. Under this authority, Burbank issued industrial user permit No.1029 authorizing discharge of only domestic wastewaters from A-H Plating to the sewers.

1.6 **Photo Documentation**

The only photographs taken during this inspection are the two depicted above and saved as ahplating-1.jpg and ahplating-2.jpg.

1.7 **Sampling Record**

There are no compliance samples since A-H Plating is not authorized to discharge under the Burbank industrial user permit No. 1029.

2.0 Sewer Discharge Standards and Limits

Federal categorical pretreatment standards (where they exist), national prohibitions, State groundwater, and the local limits (where they exist) must be applied to the sewered discharges from industrial users. (40 CFR 403.5 and 403.6).

Summary

No Federal categorical pretreatment standards, national prohibitions, or local limits apply because there are no process-related wastewater discharges to the sewers. However, A-H Plating does generate wastewaters that would be regulated under the Federal job-shop electroplating standards if they were discharged. The application of Federal standards, national prohibitions, and local limits was determined through visual inspection.

Requirements

None.

Recommendations

 The Burbank permit should also list the Federal standards that would apply if processrelated wastewaters were discharged to the sewers.

2.1 Classification by Federal Point Source Category

A-H Plating would qualify as an existing source job-shop metal finisher subject to the Federal standards in 40 CFR 413 if its process-related wastewaters were discharged to the sewers. A-H Plating would not qualify as a new source subject to the Federal standards in 40 CFR 433 because it began operations in its current configuration in 1978 before the August 31, 1982 promulgation date of the metal finishing rule for new sources. In addition, any discharge would not qualify under any other Federal rule in 40 CFR 407-471.

2.2 Local Limits and National Prohibitions

Local limits and national prohibitions would apply to any discharge of the process-related wastewaters generated on-site. Local limits and national prohibitions are meant to express the limitations on non-domestic discharges necessary to protect the sewers, treatment plants, treatment plant sludges, and their receiving waters from adverse impacts. Generally, technically-based numerical local limits supplant national prohibitions.

2.3 Federal Categorical Pretreatment Standards Existing Source Job-Shop Electroplating - 40 CFR 413

40 CFR 413	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CNt	CNa	TTO	TM
daily-maximum (mg/l)	1.2	7.0	4.5	0.6	4.1	-	4.2	1.9	5.0	2.13*	10.5
four-day average (mg/l)	0.7	4.0	2.7	0.4	2.6	-	2.6	1.0	2.7	-	6.8
stat conversion to mo-avgs	0.5	2.5	1.8	0.3	1.8	-	1.8	0.55	1.5	-	5.0
bold - the only standards that apply if the discharge is <10,000 gpd / * TTO 4.57 mg/l											

Applicability - The Federal job-shop electroplating standards apply to job-shop metal finishers that do not own more than 50% of the parts processed and were in operation in their present configuration before the August 31, 1982 proposal date of the Federal metal finishing rule. The job-shop electroplating standards in 40 CFR 413.14(b)(f), 413.24(b)(f), 413.54(b)(f), and 413.64(b)(f) would apply to any dischargers under 10,000 gallons per day apply to any process wastewater discharges from A-H Plating to the sewers.

2.4 Compliance Sampling

There are no identified process wastewater discharges to the sewers. As a result, there are no sampling points for the non-domestic wastewaters.

2.5 Pollutants of Concern

There are no pollutants of concern as long as A-H Plating does not discharge its process-related wastewaters. The pollutants of concern would comprise those regulated by the Federal existing source job-shop metal finishing standards, national prohibitions (pH), and certain local limits for which there is a potential to exceed the local limits.

3.0 Compliance with Federal Standards, National Prohibitions, and Local Limits

Industrial users must comply with the Federal categorical pretreatment standards that apply to their process wastewater discharges. 40 CFR 403.6(b).

Categorical industrial users must comply with the prohibition against dilution of the Federally-regulated waste streams as a substitute for treatment. 40 CFR 403.6(d).

Industrial users must comply with the provision restricting the bypass of treatment necessary to comply with any pretreatment standard or requirement. 40 CFR 403.17(d).

All non-domestic wastewater discharges to the sewers must comply with local limits and the national prohibitions. 40 CFR 403.5(a,b,d).

Summary

A-H Plating achieves compliance with the Federal standards for existing source job-shop metal finishers by not discharging the Federally-regulated process-regulated wastewaters to the sewers. A-H accomplishes "zero-discharge" compliance through the collection and off-site hauling of all generated wastewaters. In the same way, A-H Plating ensures compliance with the national prohibitions and local limits that would apply to discharges. However, the use of a portable pump and long hoses to deliver spent solutions and spent static rinses to totes for off-site disposal does make it physically possible for an unauthorized discharge of process-related wastewaters to the sewers.

Requirements

• None.

Recommendations

- A-H Plating should eliminate the possession on-site of long hoses currently used in the transfer of solutions and spents throughout the facility.
- Hard piping from the tanks generating spents to the chemical storage area would ensure
 the transfer and delivery of spent solutions, spent static rinses, and residuals to only the
 totes for off-site hauling.

3.1 National Objectives

The general pretreatment regulations were promulgated in order to fulfill the national objectives to prevent the introduction of pollutants that:

- (1) cause operational interference with sewage treatment or sludge disposal,
- (2) pass-through sewage treatment into the receiving waters or sludge,

- (3) are in any way incompatible with the sewerage works, or
- (4) do not improve the opportunities to recycle municipal wastewaters and sludge.

This inspection did not include an evaluation of whether achievement of the national objectives in 40 CFR 403.2 have been demonstrated by the Burbank wastewater treatment plant through consistent compliance with their sludge and discharge limits.

3.2 Compliance with Standards and Limits

A-H Plating complies with the applicable Federal standards and local limits strictly through the proper handling of spents by the shop operators. Consistent compliance depends on the successful and consistent delivery of spent solutions, spent static rinses, and residuals to totes for hauling off-site as hazardous. An inadvertant or unauthorized discharge of process-related wastewaters of any quality to the sewers would violate the local limits as expressed by the Burbank permit for A-H Plating as a narrative prohibition against discharge. An inadvertant or unauthorized discharge likely would also violate the numerical Federal standards and local limits since the A-H does not treat any wastewaters on-site for the removal of metals.

A-H Plating uses a portable pump outfitted with a long hose extension for the delivery. The portable pump can be stationed any where in the shop and the hose is long enough that its outlet can be directed from nearly every tank to any location on-site, including the bathroom sewer connection. It would be better to have a hard-plumbed line, with stand-pipe inlets in the metal finishing area, leading to the chemical storage area. This would not preclude the use of the portable pump to deliver the spents but it would eliminate the need for long hose lengths. Maintaining only short hose lengths prevents the delivery of spent solutions to improper disposal points. *See* the photos in section 1.4 of this report.

3.3 Dilution and Bypassing

The Federal standards in 40 CFR 403.6(d) and 403.17(d) prohibit "dilution as a substitute for treatment" and "bypassing any treatment necessary to comply with standards. There is no possibility to violate the prohibition against dilution as a substitute for treatment since A-H Plating does not provide wastewater treatment nor discharge wastewaters to the sewers. On the other hand, an inadvertant or unauthorized discharge to the sewers would violate the prohibition against bypassing treatment necessary to comply since compliance with Federal standards and local limits is achieved through the capture and off-hauling of all wastewaters.

4.0 Compliance with Federal Monitoring Requirements

Significant industrial users must self-monitor for all regulated parameters at least twice per year unless the sewerage agency monitors in place of self-monitoring. 40 CFR 403.12(e) & 403.12(g).

Each sample must be representative of the sampling day's operations. Sampling must be representative of the conditions occurring during the reporting period. 40 CFR 403.12(g) and 403.12(h).

Summary

A-H Plating does not qualify as a significant industrial user since it does not discharge its Federally-regulated wastewaters to the sewers. As a result, it is not necessary to for Burbank to issue a permit with self-monitoring requirements. However, since A-H Plating achieves compliance with the Federal metal finishing standards, national prohibitions, and local limits through zero-discharge practices, it is appropriate that Burbank has issued a permit that substitutes a written certification of no discharge in lieu of semi-annual self-monitoring.

Requirements

None.

Recommendations

• The semi-annual self-certification statements should include copies of the hazardous waste manifests documenting the off-hauling of spents, spent static rinses, and residuals.